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(54) Title: INORGANIC POWDERS WITH SELECTIVITY TOWARDS CARBON MONOXIDE, HCN, OR NO

(57) Abstract: A silica powder with encapsulated active components towards selective filtration is prepared by the incorporation of a protein or molecule containing an inorganic element into a polymeric substance followed by a fast freezing that preserves the open polymeric network and the activity of the protein or molecule containing an inorganic element. The encapsulated polymeric protein or molecule can be used as a color change indicator for CO, HCN or NO.